Interregional Travel: As presented by Mid and Small size MPOs

Background:

The September 2008, Regional Target Advisory Committee (RTAC) report recognized the importance of interregional travel and recommended that a Metropolitan Planning Organization's (MPO) ability to affect the emissions from these trips through land use and transportation strategies should be a key factor in determining how trip emissions are apportioned among MPOs. The RTAC also recognized that in most cases, each region has an equal opportunity to affect emissions from trips that regularly cross over a shared boundary, and therefore should share responsibility for reducing those emissions. The RTAC report identified four interregional trip types:

- Trips that begin in an MPO region and end in another MPO region after sharing a shared MPO boundary;
- Trips that travel through and MPO region but begin and end outside of the MPO region (through trips);
- Trips that begin in an MPO region but do not end in an MPO region (international, interstate, tribal land, and military base trips);
- And Trips that end in an MPO region but do not begin in an MPO region (international, interstate, tribal land, and military base trips);

In the period following the release of the RTAC report leading up to ARB's June release of Draft Greenhouse Gas Emissions Reduction Targets, the MPOs of the state have tried to determine an adequate way to measure vehicle miles travelled (VMT) attributable to the four interregional trip types indentified in the September 2008, RTAC report. As part of this exercise Caltrans has indicated a statewide model capable of adequately accounting for VMT associated with interregional travel will not be complete/available until 2012. The current statewide model has not been updated to reflect the most recently adopted RTPs for each of the state's 18 MPO regions. In addition most MPO travel demand models do not include a planning area adequate to capture travel beyond the MPO boundaries. Absent a statewide model capable of consistent measurement of vehicle miles travelled attributable to interregional travel across the state, there is no consistent approach to quantify interregional VMT.

Characteristics of Interregional Travel in Mid and Small Size MPOs:

MPOs statewide agree that capturing the VMT associated with interregional travel is essential to adequately implementing SB-375. For this reason the mid and small size MPOs would like to highlight characteristics of Interregional Travel within their regions. Several factors contribute to travel across MPO boundaries such as the lack of a jobs housing balance within the MPO region; tourist venues within the MPO region, such as national parks and scenic coastlines; as well as access to "affordable" housing are examples.

Interregional travel associated with the presence of Lake Tahoe, Monterey Bay, scenic coastlines, national forests, Morro Bay, and various other land uses within MPO regions draw travel from other regions. These and similar land uses are not subject to relocation and require greenhouse gas reduction strategies that target choice travelers. Strategies such as congestion pricing do not prevent people from taking vacations. Carpool and van pool programs are not as appealing to vacationers as they are to individuals commuting to work.

The Silicon Valley, state and federal employment centers such as the State's Capital and associated state departments (Sacramento), and the U.S. EPA (San Francisco), as well as other large regional job centers draw workers from outside their respective MPO regions often from mid and small size MPO regions. Factors such as "jobs housing fit", jobs housing balance, and housing affordability weigh into an individual's "choice" to work outside the region they live. Solutions to imbalances between jobs and housing, housing affordability, and housing fit are not created nor implemented overnight. Solutions occur gradually and over time. Recognizing this, solutions to reducing interregional travel related to the interaction of jobs and housing will change over time as well. For mid and small size MPOs, short term solutions to reducing greenhouse gas emissions may be a combination of long term changes in land use coordinated with immediate short term solutions such as car pool and van pool programs.

The RTAC report also identified trips to and from military bases and tribal lands as interregional trips. These land uses similar to recreational land uses are not subject to relocation. Strategies such as congestion pricing do not detract individuals from reporting to duty at military facilities of from returning to tribal lands. MPOs do not have the authority within the boundaries of military facilities or tribal lands. These land uses are sovereign regions within MPO boundaries.

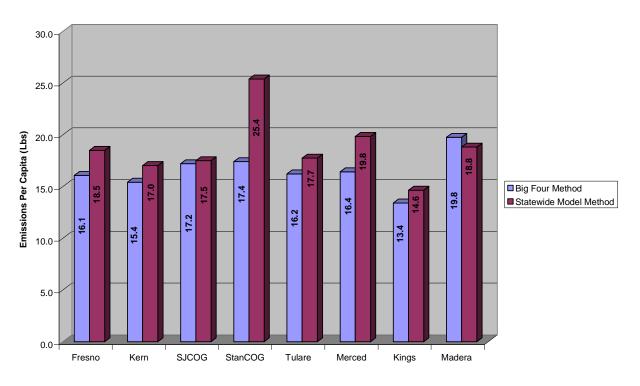
With limited resources mid and small sized MPO regions throughout the state seek to implement the most cost effective strategies to reduce greenhouse gas emissions within their respective regions. The most cost effective method can vary from MPO to MPO and can vary from 2020 to 2035 within the same MPO. With an emphasis on finding the most cost effective approaches to the reduction of greenhouse gas emissions, there is increased importance to accurately quantify VMT applicable to interregional travel.

Currently there are two approaches to the quantification of VMT applicable to interregional travel. The "Big Four" approach and the San Joaquin Valley approach. Both approaches utilize the RTAC methodology to split interregional trips 50/50 between MPO regions; however the two approaches differ in their ability to quantify VMT associated with travel that begins in one MPO region straddles another MPO region as a through trip and ends in a third MPO region. Absent a statewide model, VMT associated with these trips is difficult to capture. The San Joaquin Valley MPOs working with Dowling Associates Inc., developed a method to update the statewide model with land use from the 8 San Joaquin Valley MPOs to estimate interregional travel within the San Joaquin Valley for these trips ("modified statewide model approach". Land use for MPO regions outside of the San Joaquin Valley were updated with Department of Finance population projections. This approach seeks to estimate statewide interregional travel, however due to time constraints, complete calibration of this approach to statewide traffic counts was not possible.

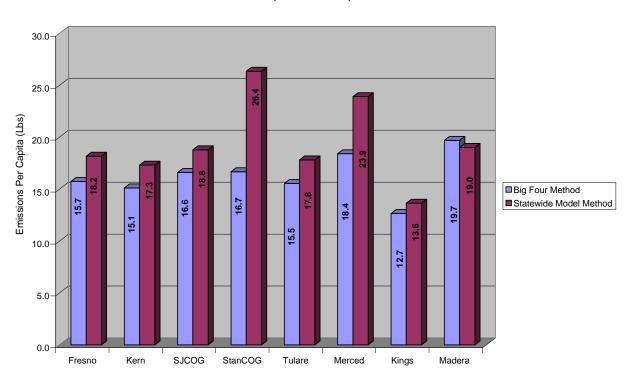
The "Big Four" approach quantifies VMT within each MPO region, however, due to the nature of MPO models (limited planning areas) struggles to quantify VMT associated with trips that straddle multiple MPO regions (i.e. trips that begin in one MPO region travel through another MPO region and end in a third MPO region). Both approaches, although similar in their use of the RTAC 50/50 split result in different greenhouse gas emissions estimates for the same MPO. Examples of this can be found in the tables below.

Table 1: Greenhouse Gas Emissions - "Big Four Approach" and "Modified Statewide Model Approach"

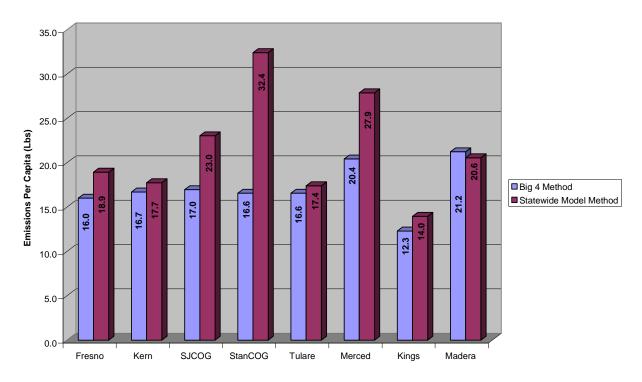
San Joaquin Valley Interregional Travel Greenhouse Gas Emissions Per Capita (2005 Baseline)



San Joaquin Valley Interregional Travel Greenhouse Gas Emissions Per Capita (2020 Baseline)



San Joaquin Valley Interregional Travel Greenhouse Gas Emissions Per Capita (2035 Baseline)



In the case of the SBCAG Region, i.e., Santa Barbara County, a preliminary computation indicates that there are significant differences in the VMT (passenger vehicles) and GHG emissions when comparing these two approaches. The following two charts demonstrate the impacts of VMT and GHG emissions per Capita for 2035 (without Pavley/LCFS adjustments) for Santa Barbara County based on the two approaches.

The 50/50% IX-XI approach would incur a much more significant VMT impact on SBCAG's GHG emissions than the approach which assumes 100% IX-XI flows within the Santa Barbara County. The "50/50 split" approach results in approximately 20-30% higher daily VMT, and consequently GHG emissions (without Pavley/LCFS adjustments). This is due to the longer traveling distances for these IX-XI trips originating from the neighboring MPOs.

